

Patent Claims

1. An air inlet, in particular for a motor vehicle,
5 having an air duct (2) supplying air, a metering device
(3) and an air-guiding device (4), characterized in
that the air in the air-guiding device (4), at least in
regions, is divided into a plurality of subducts (11,
12), without any significant change in direction of the
10 subducts (11, 12) being provided in the divided entry
region (10).

2. The air inlet as claimed in claim 1, characterized
in that the air-guiding device (4) has a partition
15 which, at least in regions, runs as an extension of the
longitudinal direction of the air duct (2).

3. The air inlet as claimed in one of the preceding
claims, characterized in that the division of the air
20 duct (2) into a plurality of subducts (11, 12) is
provided for at a distance of 1 to 10, in particular 2
to 5, times the mean diameter of the air duct (2) in
the corresponding region upstream of the exit of the
air from the air-guiding device (4).

25 4. The air inlet as claimed in one of the preceding
claims, characterized in that the air-guiding device
(4) has an elbow (15), with the air being divided into
a plurality of, in particular two, subducts (11, 12) in
30 the region of the elbow (15).

5. The air inlet as claimed in one of the preceding
claims, characterized in that the angle of the elbow (15)
is from 60° to 120°, in particular from 80° to 100°.

35 6. The air inlet as claimed in claim 5, characterized
in that the angle of the elbow (15) is 90°.

7. The air inlet as claimed in one of the preceding claims, characterized in that the division in the entry region (10) into the region with two subducts (11, 12) is axially symmetrical.

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8. The air inlet as claimed in one of the preceding claims, characterized in that the metering device (3) is arranged upstream of the air-guiding device (4).

10 9. The air inlet as claimed in one of the preceding claims, characterized in that the air-guiding device (4) is designed in such a manner that a middle region and an outer region, to which air can flow through different subducts (11, 12), are provided in the
15 outflow region from the air-guiding device (4).

10. The air inlet as claimed in one of the preceding claims, characterized in that the air-guiding device (4) has a coiled or elongate, helical region.

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11. The air inlet as claimed in one of the preceding claims, characterized in that the metering device (3) is designed in such a manner that the air which can be fed to the individual subducts (11, 12) is
25 controllable.

12. The air inlet as claimed in one of the preceding claims, characterized in that the metering device (3) controls both the distribution of the incoming air
30 between the individual subducts (11, 12) and the metering thereof.

13. The air inlet as claimed in one of the preceding claims, characterized in that the metering device (3) provided is an actuating device (20) which has a double
35 flap (21) controlled by means of a cam disc (22) or a kinematic mechanism.

14. The air inlet as claimed in claim 13, characterized in that the actuating device (20) is connected directly, via a shaft, to an actuating member (23).